

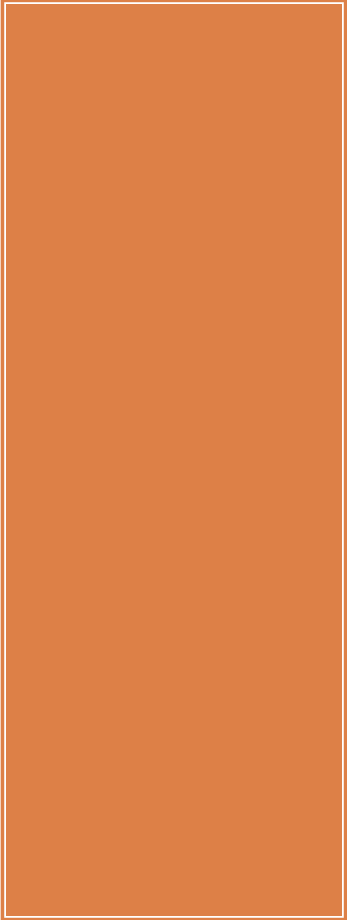


# Children's Emotional and Behavioral Health: Results from the 2007 National Survey of Children's Health

DataSpeak • February 9, 2010

# Goal for Presentation

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- 
- Provide an overview of the nature and extent of mental health problems among children in the US
  - Share latest data from the 2007 National Survey of Children's Health (NSCH) on:
    - ▣ Prevalence of selected mental health conditions;
    - ▣ Prevalence of treatment received.
  - Focus on geographic disparities

# Background & Questions of Interest

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## What we know:

20-25% of young people experience a mental disorder before age 18

50% of all cases of mental illness among adults start before age 14;  
75% before age 24

Co-morbid with physical and mental illness

## □ Estimates of mental health conditions and related treatment among children often:

- Have limited geographic representation.
  - Not Nationally-representative
  - Not State-specific
- Utilize broad measures that combine emotional, behavioral, and/or developmental conditions.

## □ Questions of interest:

1. What is the prevalence of diagnosed emotional and behavioral conditions?
2. What percentage of children with emotional or behavioral conditions receive treatment?
3. How do these estimates vary across the nation?

# Methods:

## 2007 National Survey of Children's Health

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### Quick Facts:

Cross-sectional

Telephone-based  
survey (SLAITS)

Data collected April  
2007 – July 2008

Parents/guardians  
were respondents

Interview completion  
rate = 66%

Sample = 91,642

- Sponsored by the Maternal and Child Health Bureau; conducted by CDC's National Center for Health Statistics;
- Examines the physical and emotional health of children ages 0-17 years of age with additional questions on community and family factors that can influence these indicators;
- Provides both State and National estimates.

# Methods:

## Prevalence of conditions and treatment

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### **Diagnosed Conditions** (children $\geq 2$ years of age):

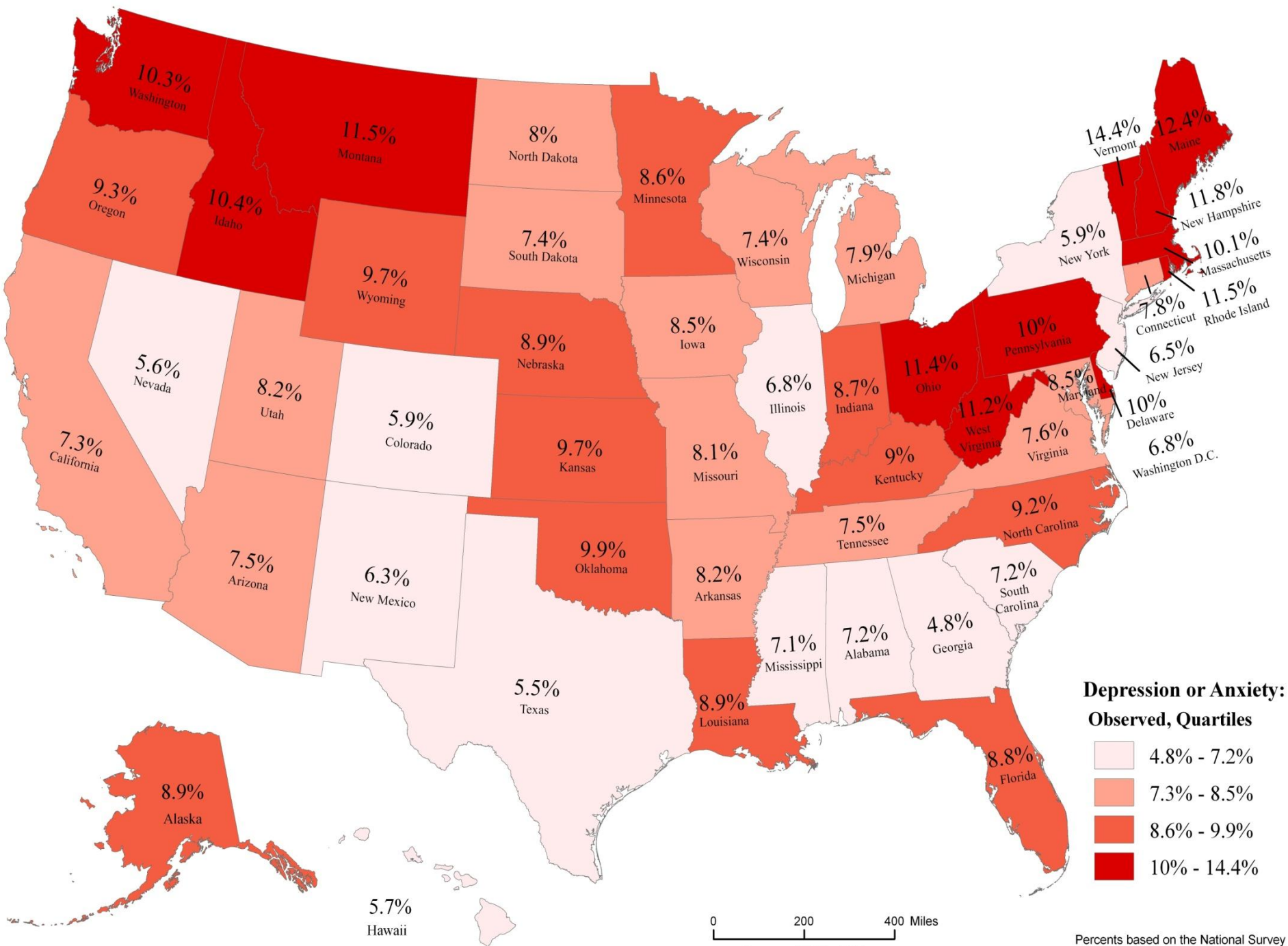
- Parent report that a doctor or other health care provider ever told them that the child had:
  - ▣ Depression;
  - ▣ Anxiety problems;
  - ▣ Behavioral or conduct problems, such as Oppositional Defiant Disorder (ODD) or Conduct Disorder (CD).
  
- **Analytic Decisions:**
  - ▣ Limited analyses to school-aged children (6-17 years) = analytic sample of 64,076
  - ▣ Combined Anxiety and Depression
  - ▣ Focus on “ever” rather than “current” diagnoses

# Prevalence:

## Depression/Anxiety

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- **7.8%** of children aged 6-17 ever diagnosed with depression or anxiety (**3.9 m**); **4.7%** currently diagnosed (**2.3 m**)
  - 4.7% ever diagnosed with depression; 5.5% ever diagnosed with anxiety
  - 51.3% ever diagnosed with depression also diagnosed with anxiety;
  - 44.2% ever diagnosed with anxiety also diagnosed with depression;
  - 33.5% ever diagnosed with depression or anxiety also diagnosed with ODD/CD
  
- **Sociodemographic & health factors:**
  - Male; Older (12-17); White and NH Multiracial;
  - Living in household without two biologic/adoptive parents;
  - Being poor or near poor;
  - Having public insurance;
  - Having physical or mental health problems;
  - Poor maternal mental health; and
  - Attending an unsafe school.



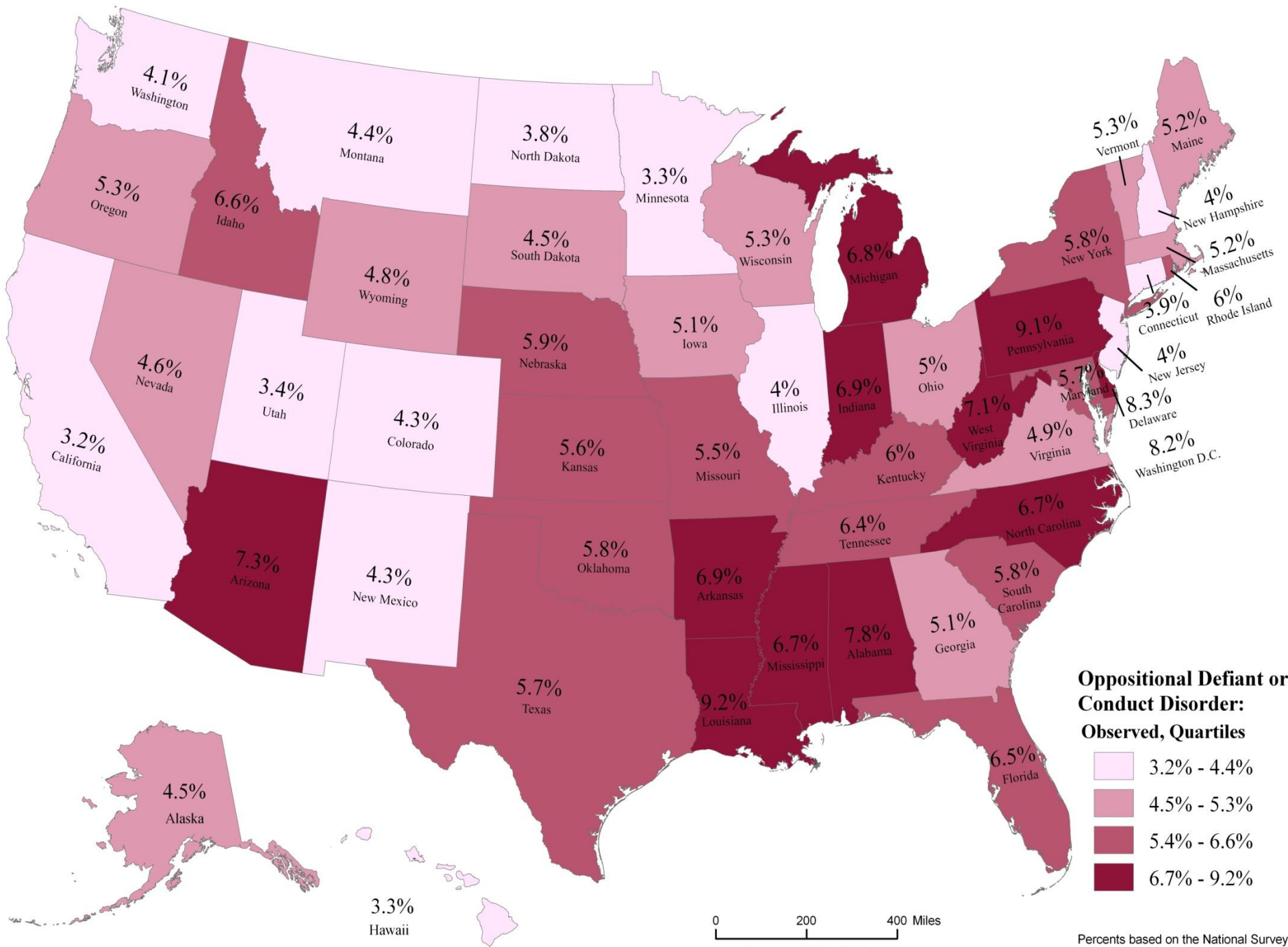
# Prevalence:

## Behavioral/Conduct Problems (ODD/CD)

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- **5.4%** of children aged 6-17 ever diagnosed with ODD or CD (**2.7 m**); **4.0%** currently diagnosed (**1.9 m**)
  - ▣ 34.3% ever diagnosed with ODD/CD also ever diagnosed with depression
  - ▣ 35.5% ever diagnosed with ODD/CD also ever diagnosed with anxiety
  - ▣ 48.4% ever diagnosed with ODD/CD also ever diagnosed with either depression or anxiety
  
- **Sociodemographic & health factors:**
  - ▣ Male; NH Black;
  - ▣ Living in household without two biologic/adoptive parents;
  - ▣ Being poor or near poor;
  - ▣ Having public insurance;
  - ▣ Having physical or mental health problems;
  - ▣ Poor maternal mental health; and
  - ▣ Attending an unsafe school.





# Multivariate Results: Diagnoses

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- Adjusted prevalence estimates:
  - ▣ Depression/Anxiety: 5.2% (TX) – 12.4% (VT)
- Adjusted odds ratios:
  - ▣ Higher odds of ever being diagnosed with depression or anxiety in 18 states (ref = GA)
  - ▣ Children in 8 states (MA, ME, NH, RI, VT\*, MT, OH, WA) had  $\geq 2$  times the odds of ever being diagnosed.
  - ▣ Older age, public insurance, poor physical or mental health, and poor maternal mental health associated with higher odds of ever being diagnosed.

# Multivariate Results: Diagnoses

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- Adjusted prevalence estimates:
  - ▣ ODD/CD: 3.2% (MT) – 8.0% (AZ)
  
- Adjusted odds ratios:
  - ▣ Children in Arizona and Pennsylvania had  $\geq 2$  times the odds of ever being diagnosed (ref = CA).
  - ▣ Being NH Black, having public insurance, poor physical or mental health, and poor maternal mental health associated with higher odds of ever being diagnosed.

# Prevalence: Treatment

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## **All Children 6-17 Years**

- Nearly 10% of children aged 6-17 years old received some kind of mental health treatment or counseling in the past 12 months.
- State-level: Prevalence of treatment ranged from 6.4% (TX) to 15.5% (PA)
- Region-level: Prevalence of treatment ranged from 7.5% in Region VI to 13.1% in Region I.

## **Children 6-17 Years with Diagnosis**

- Overall, 55% of children ever diagnosed with a mental health condition received mental health treatment or counseling the past 12 months (62% of those currently diagnosed)
- Prevalence of treatment varied by state of residence:
  - ▣ Dep/Anx: 42.6% (NV) – 72.7% (TN)
  - ▣ ODD/CD: 31.7% (LA) -- 78.4% (PA)
  - ▣ Either: 35.0% (LA) -- 67.3% (ND)

# Multivariate Results: Treatment

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- Depression/Anxiety: Odds of not receiving treatment higher in 4 states: ID, KY, LA, NV (ref = TN)
- ODD/CD: Odds of not receiving treatment higher in 17 states (ref = PA)
  - ▣ AOR > 10.0 in LA
  - ▣ AOR > 6.0 in OK, NV, MS, IL, FL
- Either: Odds of not receiving treatment higher in 16 states (ref = ND)
  - ▣ Driven by results for children with behavioral conditions

# Multivariate Results: Treatment

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- Higher odds of not receiving past-year treatment associated with being uninsured.
- Lower odds of not receiving past-year treatment associated with:
  - ▣ Being NH multiracial;
  - ▣ Having ever been diagnosed with other mental health condition; and
  - ▣ Having a mother in poor mental health.

# Limitations

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- ❑ Data based on parent report without clinical validation
- ❑ No information on nature, extent, or setting of mental health treatment or counseling
- ❑ Cross-sectional data
- ❑ Telephone survey

# Discussion: Questions of Interest

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1. ***What is the prevalence of diagnosed emotional and behavioral conditions?***
  - ▣ *7.8% or 3.8 m school-aged children have ever been diagnosed with depression or anxiety*
  - ▣ *5.4% or 2.7m of school-aged children have ever been diagnosed with a behavioral condition like ODD or CD*
2. ***What percentage of children with emotional or behavioral conditions receive treatment?***
  - ▣ *9.9% of 6-17 year olds have received some kind of mental health treatment or counseling in past 12 months, regardless of diagnosis*
  - ▣ *≈ 50% of children ever diagnosed with an emotional or behavioral condition received treatment or counseling in past 12 months*
3. ***How do these estimates vary across the nation?***
  - ▣ *After adjustment, greater state-level variation in the odds of ever being diagnosed with depression/anxiety than ODD/CD*
  - ▣ *State-level variation for not receiving treatment greater for those with ODD/CD than depression or anxiety.*



# Discussion

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1. **Estimates have changed since 2003 NSCH:** Prevalence of depression or anxiety increased from 5.4% to 7.8% while prevalence of ODD/CD decreased from 6.3% to 5.4%.
  - Increase in diagnosis of emotional conditions;
  - Increase in the accuracy of diagnosing developmental conditions and behavioral mental health
  
2. **State-of-residence associated with diagnosis:**
  - Even after controlling for child and family-level factors, significant state-level differences observed for being diagnosed with depression or anxiety;
  - Suggests that state-level practices/approaches to pediatric mental health may have impact on early identification.

# Discussion

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## 3. **State-of-residence associated with treatment:**

- Even after controlling for child and family-level factors, significant state-level differences observed for receiving past-year treatment among those with ODD/CD;
- Could reflect children “aging out” of behavioral diagnosis and therefore not needing treatment.

## 4. **Access to treatment remains a concern for nearly half of all children ever diagnosed and 40% of those with a current diagnosis:**

- More information is needed about what parents consider to be treatment as well as the nature, extent, and setting of treatment received.

# Questions and Feedback

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